

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model
Run on: August 3, 2004, 18:46:09 ; Search time 66 Seconds
(without alignments)
3834.206 Million cell updates/sec

Title: US-09-941-042C-1
Perfect score: 456
Sequence: 1 ggaacatattcaatacatt.....ggtaaaaagcagttacagag 456

Scoring table: IDENTITY\_NUC
Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA.\*
1: /cgn2\_6/ptodata/2/ina/5A\_COMB.seq.\*
2: /cgn2\_6/ptodata/2/ina/5B\_COMB.seq.\*
3: /cgn2\_6/ptodata/2/ina/6A\_COMB.seq.\*
4: /cgn2\_6/ptodata/2/ina/6B\_COMB.seq.\*
5: /cgn2\_6/ptodata/2/ina/PCTUS\_COMB.seq.\*
6: /cgn2\_6/ptodata/2/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Table with columns: Result No., Score, Query Match, Length, DB ID, Description. Contains 27 rows of search results.

Table with columns: C, 28, 51.4, 11.3, 665, 2, US-08-883-795A-36, Appl. Contains alignment data for various sequences.

ALIGNMENTS

RESULT 1
US-08-508-786-5
; Sequence 5, Application US/08508786
; Patent No. 5837876
; GENERAL INFORMATION:
; APPLICANT: Conkling, Mark A.
; APPLICANT: Mendu, Nandini
; TITLE OF INVENTION: Root Cortex Specific Gene Promoter
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &
; ADDRESSEE: Gibson
; STREET: Post Office Drawer 34009
; CITY: Charlotte
; STATE: No. 5837876th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/508.786
; FILING DATE:
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5051-294
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-420-2200
; TELEFAX: 919-881-3175
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1030 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-508-786-5

Query Match 100.0%; Score 456; Length 1030;
Best Local Similarity 100.0%; Pred. No. 7.8e-86;
Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 GGAAACATATTCAATTCAGTTAGTTTGGTACTCAATCGTAGAATCTTTGGCCCTT 60
Db 1 GGAAACATATTCAATTCAGTTAGTTTGGTACTCAATCGTAGAATCTTTGGCCCTT 60

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Best Local Similarity 100.0%; Pred. No. 7.8e-86;
Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 GGAAACAATTTCAATCAGTTTGGTACTCATAAATCGTAGAATACTTTGTGCTT 60
Db 1 GGAAACAATTTCAATCAGTTTGGTACTCATAAATCGTAGAATACTTTGTGCTT 60
Qy 61 GCTAATAAGATACTTGAATAGCTTAAATATAAATAAGCAATAAGATTTTGA 120
Db 61 GCTAATAAGATACTTGAATAGCTTAAATATAAATAAGCAATAAGATTTTGA 120
Qy 121 ATTAGTATTTTGAAGTTTAAATTTTAACTTAAATATAAATAAGCAATAAG 180
Db 121 ATTAGTATTTTGAAGTTTAAATTTTAACTTAAATATAAATAAGCAATAAG 180
Qy 181 ATGAAAATTTTAAATAGCTTAAATATAAATAAGCAATAAGATTTTGA 240
Db 181 ATGAAAATTTTAAATAGCTTAAATATAAATAAGCAATAAGATTTTGA 240
Qy 241 TTTAATCGGTACAGTTTAAATTTTAACTTAAATATAAATAAGCAATAAG 300
Db 241 TTTAATCGGTACAGTTTAAATTTTAACTTAAATATAAATAAGCAATAAG 300
Qy 301 AATTATCGGTACAGTTTAAATTTTAACTTAAATATAAATAAGCAATAAG 360
Db 301 AATTATCGGTACAGTTTAAATTTTAACTTAAATATAAATAAGCAATAAG 360
Qy 361 AATCGGTTCCGTCAGTTTAAATTTTAACTTAAATATAAATAAGCAATAAG 420
Db 361 AATCGGTTCCGTCAGTTTAAATTTTAACTTAAATATAAATAAGCAATAAG 420
Qy 421 CCTAGTTGTTTATAGTAAATAGCAATAAGCAATAAGATTTTGA 456
Db 421 CCTAGTTGTTTATAGTAAATAGCAATAAGCAATAAGATTTTGA 456

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PCT-US96-12158-5
; Sequence 5, Application PC/TUS9612158
; GENERAL INFORMATION:
; APPLICANT: Conkling, Mark A.
; APPLICANT: Mendu, Nandini
; TITLE OF INVENTION: Root Cortex Specific Gene Promoter
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &
; ADDRESSEE: Gibson
; STREET: Post Office Drawer 34009
; CITY: Charlotte
; STATE: North Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/12158
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5051-294
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-420-2200
; TELEFAX: 919-881-3175
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1030 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
PCT-US96-12158-5
Query Match 100.0%; Score 456; DB 5; Length 1030;

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RESULT 2
US-08-508-786-4
; Sequence 4, Application US/08508786
; Patent No. 5837876
; GENERAL INFORMATION:
; APPLICANT: Conkling, Mark A.
; APPLICANT: Mendu, Nandini
; TITLE OF INVENTION: Root Cortex Specific Gene Promoter
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &
; ADDRESSEE: Gibson
; STREET: Post Office Drawer 34009
; CITY: Charlotte
; STATE: North Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/508.786
; FILING DATE:
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5051-294
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-420-2200
; TELEFAX: 919-881-3175
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1294 base pairs

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RESULT 3
US-08-508-786-4
; Sequence 4, Application US/08508786
; Patent No. 5837876
; GENERAL INFORMATION:
; APPLICANT: Conkling, Mark A.
; APPLICANT: Mendu, Nandini
; TITLE OF INVENTION: Root Cortex Specific Gene Promoter
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &
; ADDRESSEE: Gibson
; STREET: Post Office Drawer 34009
; CITY: Charlotte
; STATE: North Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/12158
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5051-294
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-420-2200
; TELEFAX: 919-881-3175
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1030 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
PCT-US96-12158-5
Query Match 100.0%; Score 456; DB 5; Length 1030;

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; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-508-786-4

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Query Match 100.0%; Score 456; DB 2; Length 1294;
Best Local Similarity 100.0%; Pred. No. 7.9e-86;
Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Oy 61 GCTAATAAAGATACCTTGAATAGCTTAGTTAAATATAAATAGCATAATAGATTTTAGGA 120
Db 325 GCTAATAAAGATACCTTGAATAGCTTAGTTAAATATAAATAGCATAATAGATTTTAGGA 384
Oy 121 ATTAGTATTTTGGATTTTAAATAGCTTGTAACTTGTAACTTAAATTTTCAATATTTAGGA 180
Db 385 ATTAGTATTTTGGATTTTAAATAGCTTGTAACTTGTAACTTAAATTTTCAATATTTAGGA 444
Oy 241 TTTAATCGGTATAGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 300
Db 505 TTTAATCGGTATAGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 564
Oy 301 AATTAATCGGTATAGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 360
Db 565 AATTAATCGGTATAGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 624
Oy 361 AATCGGTTCCGTCGGACCGGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 420
Db 625 AATCGGTTCCGTCGGACCGGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 684
Oy 421 CCTAGTTGTTTATAGGTAATATAAATAGCATAATAGATTTTAGGA 456
Db 685 CCTAGTTGTTTATAGGTAATATAAATAGCATAATAGATTTTAGGA 720

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RESULT 4
PCT-US96-12158-4
; Sequence 4, Application PC/TUS9612158
; GENERAL INFORMATION:
; APPLICANT: Conkling, Mark A.
; APPLICANT: Mendu, Nandini
; APPLICANT: Song, Wen
; TITLE OF INVENTION: Root Cortex Specific Gene Promoter
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &
; ADDRESSEE: Gibson
; STREET: Post Office Drawer 34009
; CITY: Charlotte
; STATE: North Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/12158
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 5051-294

```

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; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-420-2200
; TELEFAX: 919-881-3175
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1294 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
PCT-US96-12158-4

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Query Match 100.0%; Score 456; DB 5; Length 1294;
Best Local Similarity 100.0%; Pred. No. 7.9e-86;
Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1 GGAACAATATCAATACATCTAGTTGCTACTCATATCGCTAGAAATCTTTGTGCCTT 60
Db 265 GGAACAATATCAATACATCTAGTTGCTACTCATATCGCTAGAAATCTTTGTGCCTT 324
Oy 61 GCTAATAAAGATACCTTGAATAGCTTAGTTAAATATAAATAGCATAATAGATTTTAGGA 120
Db 325 GCTAATAAAGATACCTTGAATAGCTTAGTTAAATATAAATAGCATAATAGATTTTAGGA 384
Oy 121 ATTAGTATTTTGGATTTTAAATAGCTTGTAACTTGTAACTTAAATTTTCAATATTTAGGA 180
Db 385 ATTAGTATTTTGGATTTTAAATAGCTTGTAACTTGTAACTTAAATTTTCAATATTTAGGA 444
Oy 181 ATGAAAAATTTAATAGCTTGTAACTTGTAACTTGTAACTTAAATTTTCAATATTTAGGA 240
Db 445 ATGAAAAATTTAATAGCTTGTAACTTGTAACTTGTAACTTAAATTTTCAATATTTAGGA 504
Oy 241 TTTAATCGGTATAGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 300
Db 505 TTTAATCGGTATAGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 564
Oy 301 AATTAATCGGTATAGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 360
Db 565 AATTAATCGGTATAGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 624
Oy 361 AATCGGTTCCGTCGGACCGGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 420
Db 625 AATCGGTTCCGTCGGACCGGTTTCAATATTTTAAATATAAATAGCATAATAGATTTTAGGA 684
Oy 421 CCTAGTTGTTTATAGGTAATATAAATAGCATAATAGATTTTAGGA 456
Db 685 CCTAGTTGTTTATAGGTAATATAAATAGCATAATAGATTTTAGGA 720

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RESULT 5
US-08-508-786-3
; Sequence 3, Application US/08508786
; Patent No. 5837876
; GENERAL INFORMATION:
; APPLICANT: Conkling, Mark A.
; APPLICANT: Mendu, Nandini
; APPLICANT: Song, Wen
; TITLE OF INVENTION: Root Cortex Specific Gene Promoter
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &
; ADDRESSEE: Gibson
; STREET: Post Office Drawer 34009
; CITY: Charlotte
; STATE: No. 5837876th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:

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APPLICATION NUMBER: US/08/508,786  
 FILING DATE:  
 CLASSIFICATION: 80  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Sibley, Kenneth D.  
 REGISTRATION NUMBER: 31,665  
 REFERENCE/DOCKET NUMBER: 5051-294  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 919-420-2200  
 TELEFAX: 919-881-3175  
 INFORMATION FOR SEQ ID NO: 3:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1372 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 US-08-508-786-3

Query Match 100.0%; Score 456; DB 2; Length 1372;  
 Best Local Similarity 100.0%; Pred. No. 8e-86;  
 Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGAAACATATTCATCAATGTTAGTTGCTACTCATAAATCGTAGAATACTTTGTGCCCT 60  
 Db |  
 Qy 343 GGAAACATATTCATCAATGTTAGTTGCTACTCATAAATCGTAGAATACTTTGTGCCCT 402  
 Db |  
 Qy 61 GCTAATAAAGATACCTGAAATAGCTTAGTTAAATAAATAAATAGCATAAATAGATTTAGGA 120  
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 Qy 403 GCTAATAAAGATACCTGAAATAGCTTAGTTAAATAAATAAATAGCATAAATAGATTTAGGA 462  
 Db |  
 Qy 121 ATTAGTATTTGAGTTAAATTAATTAATGACTTGTAAACAGTTTTTATAATTTCAAGGCC 180  
 Db |  
 Qy 463 ATTAGTATTTGAGTTAAATTAATTAATGACTTGTAAACAGTTTTTATAATTTCAAGGCC 522  
 Db |  
 Qy 181 ATGAAAAATTAATGCTTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 240  
 Db |  
 Qy 523 ATGAAAAATTAATGCTTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 582  
 Db |  
 Qy 241 TTAAATCGGTACAGTTAGATTTTCAATTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 300  
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 Qy 583 TTAAATCGGTACAGTTAGATTTTCAATTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 642  
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 Db |  
 Qy 643 AATTATCGGTACAGTTAGATTTTCAATTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 702  
 Db |  
 Qy 361 AATCGGTTCCGGTCCGACGGTTCCGATCGGTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 420  
 Db |  
 Qy 703 AATCGGTTCCGGTCCGACGGTTCCGATCGGTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 762  
 Db |

RESULT 6  
 PCT-US96-12158-3  
 ; Sequence 3, Application PC/TUS9612158  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Conkling, Mark A.  
 ; APPLICANT: Conkling, Mark A.  
 ; APPLICANT: Mendu, Nandini  
 ; APPLICANT: Song, Wen  
 ; TITLE OF INVENTION: Root Cortex Specific Gene Promoter  
 ; NUMBER OF SEQUENCES: 9  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Kenneth D. Sibley; Bell, Seitzer, Park &  
 ; STREET: Post Office Drawer 34009  
 ; CITY: Charlotte  
 ; STATE: North Carolina  
 ; COUNTRY: USA  
 ; ZIP: 28234

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: PCT/US96/12158  
 FILING DATE:  
 CLASSIFICATION:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Sibley, Kenneth D.  
 REGISTRATION NUMBER: 31,665  
 REFERENCE/DOCKET NUMBER: 5051-294  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 919-420-2200  
 TELEFAX: 919-881-3175  
 INFORMATION FOR SEQ ID NO: 3:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1372 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 PCT-US96-12158-3

Query Match 100.0%; Score 456; DB 5; Length 1372;  
 Best Local Similarity 100.0%; Pred. No. 8e-86;  
 Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGAAACATATTCATCAATGTTAGTTGCTACTCATAAATCGTAGAATACTTTGTGCCCT 60  
 Db |  
 Qy 343 GGAAACATATTCATCAATGTTAGTTGCTACTCATAAATCGTAGAATACTTTGTGCCCT 402  
 Db |  
 Qy 61 GCTAATAAAGATACCTGAAATAGCTTAGTTAAATAAATAAATAGCATAAATAGATTTAGGA 120  
 Db |  
 Qy 403 GCTAATAAAGATACCTGAAATAGCTTAGTTAAATAAATAAATAGCATAAATAGATTTAGGA 462  
 Db |  
 Qy 121 ATTAGTATTTGAGTTAAATTAATTAATGACTTGTAAACAGTTTTTATAATTTCAAGGCC 180  
 Db |  
 Qy 463 ATTAGTATTTGAGTTAAATTAATTAATGACTTGTAAACAGTTTTTATAATTTCAAGGCC 522  
 Db |  
 Qy 181 ATGAAAAATTAATGCTTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 240  
 Db |  
 Qy 523 ATGAAAAATTAATGCTTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 582  
 Db |  
 Qy 241 TTAAATCGGTACAGTTAGATTTTCAATTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 300  
 Db |  
 Qy 583 TTAAATCGGTACAGTTAGATTTTCAATTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 642  
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 Qy 301 AATTATCGGTACAGTTAGATTTTCAATTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 360  
 Db |  
 Qy 643 AATTATCGGTACAGTTAGATTTTCAATTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 702  
 Db |  
 Qy 361 AATCGGTTCCGGTCCGACGGTTCCGATCGGTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 420  
 Db |  
 Qy 703 AATCGGTTCCGGTCCGACGGTTCCGATCGGTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 762  
 Db |

RESULT 7  
 US-08-508-786-2  
 ; Sequence 2, Application US/08508786  
 ; Patent No. 5837876  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Conkling, Mark A.  
 ; APPLICANT: Mendu, Nandini  
 ; APPLICANT: Song, Wen  
 ; TITLE OF INVENTION: Root Cortex Specific Gene Promoter  
 ; NUMBER OF SEQUENCES: 9  
 ; CORRESPONDENCE ADDRESS:

ADDRESS: Kenneth D. Sibley; Bell, Seltzer, Park &  
 ADDRESSEE: Gibson  
 STREET: Post Office Drawer 34009  
 CITY: Charlotte  
 STATE: No. 5837876th Carolina  
 COUNTRY: USA  
 ZIP: 28234  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/508,786  
 FILING DATE:  
 CLASSIFICATION: 800  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Sibley, Kenneth D.  
 REGISTRATION NUMBER: 31,665  
 REFERENCE/DOCKET NUMBER: 5051-294  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 919-420-2200  
 TELEFAX: 919-881-3175  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1988 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 US-08-508-786-2

APPLICANT: Conkling, Mark A.  
 APPLICANT: Mendu, Nandini  
 APPLICANT: Song, Wen  
 TITLE OF INVENTION: Root Cortex Specific Gene Promoter  
 NUMBER OF SEQUENCES: 9  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &  
 ADDRESSEE: Gibson  
 STREET: Post Office Drawer 34009  
 CITY: Charlotte  
 STATE: North Carolina  
 COUNTRY: USA  
 ZIP: 28234  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: PCT/US96/12158  
 FILING DATE:  
 CLASSIFICATION:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Sibley, Kenneth D.  
 REGISTRATION NUMBER: 31,665  
 REFERENCE/DOCKET NUMBER: 5051-294  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 919-420-2200  
 TELEFAX: 919-881-3175  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1988 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 PCT-US96-12158-2

Query Match 100.0%; Score 456; DB 2; Length 1988;  
 Best Local Similarity 100.0%; Pred. No. 8.2e-86;  
 Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGAAACATATTCAAATACATTTGCTACTCAATAATCGCTAGAACTTTTGGCCCT 60  
 DB 959 GGAAACATATTCAAATACATTTGCTACTCAATAATCGCTAGAACTTTTGGCCCT 1018  
 QY 61 GCTAATAAAGATACCTTGAATAAGCTTTAGTTAAATAATAAATAGCATAATAGATTTAGGA 120  
 DB 1019 GCTAATAAAGATACCTTGAATAAGCTTTAGTTAAATAATAAATAGCATAATAGATTTAGGA 1078  
 QY 121 ATTAGTATTTGAGTTTAAATTTACTTGTGACCTTTTAACTTCTATATAAATTTTCAATATGTA 180  
 DB 1079 ATTAGTATTTGAGTTTAAATTTACTTGTGACCTTTTAACTTCTATATAAATTTTCAATATGTA 1138  
 QY 181 ATGAAAAATTTAATGCTTTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 240  
 DB 1139 ATGAAAAATTTAATGCTTTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 1198  
 QY 241 TTTAATCGGTATAGTTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 300  
 DB 1199 TTTAATCGGTATAGTTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 1258  
 QY 301 AATATCGGTATAGTTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 360  
 DB 1259 AATATCGGTATAGTTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 1318  
 QY 361 AATCGGTTCGGTCCGACGGTTCCGATCGGTTTAACTTCTATATAAATTTTCAATATGTA 420  
 DB 1319 AATCGGTTCGGTCCGACGGTTCCGATCGGTTTAACTTCTATATAAATTTTCAATATGTA 1378  
 QY 421 CCTAGTTGTTGTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 456  
 DB 1379 CCTAGTTGTTGTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 1414

Query Match 100.0%; Score 456; DB 5; Length 1988;  
 Best Local Similarity 100.0%; Pred. No. 8.2e-86;  
 Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGAAACATATTCAAATACATTTGCTACTCAATAATCGCTAGAACTTTTGGCCCT 60  
 DB 959 GGAAACATATTCAAATACATTTGCTACTCAATAATCGCTAGAACTTTTGGCCCT 1018  
 QY 61 GCTAATAAAGATACCTTGAATAAGCTTTAGTTAAATAATAAATAGCATAATAGATTTAGGA 120  
 DB 1019 GCTAATAAAGATACCTTGAATAAGCTTTAGTTAAATAATAAATAGCATAATAGATTTAGGA 1078  
 QY 121 ATTAGTATTTGAGTTTAAATTTACTTGTGACCTTTTAACTTCTATATAAATTTTCAATATGTA 180  
 DB 1079 ATTAGTATTTGAGTTTAAATTTACTTGTGACCTTTTAACTTCTATATAAATTTTCAATATGTA 1138  
 QY 181 ATGAAAAATTTAATGCTTTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 240  
 DB 1139 ATGAAAAATTTAATGCTTTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 1198  
 QY 241 TTTAATCGGTATAGTTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 300  
 DB 1199 TTTAATCGGTATAGTTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 1258  
 QY 301 AATATCGGTTCGGTCCGACGGTTCCGATCGGTTTAACTTCTATATAAATTTTCAATATGTA 360  
 DB 1259 AATATCGGTTCGGTCCGACGGTTCCGATCGGTTTAACTTCTATATAAATTTTCAATATGTA 1318  
 QY 361 AATCGGTTCGGTCCGACGGTTCCGATCGGTTTAACTTCTATATAAATTTTCAATATGTA 420  
 DB 1319 AATCGGTTCGGTCCGACGGTTCCGATCGGTTTAACTTCTATATAAATTTTCAATATGTA 1378  
 QY 421 CCTAGTTGTTGTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 456  
 DB 1379 CCTAGTTGTTGTTATAGTTTAACTTCTATATAAATTTTCAATATGTA 1414

RESULT 8  
 PCT-US96-12158-2  
 ; Sequence 2, Application PC/TUS9612158  
 ; GENERAL INFORMATION:

RESULT 9

US-08-508-786-1  
 ; Sequence 1, Application US/08508786  
 ; Patent No. 5837876  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Conkling, Mark A.  
 ; APPLICANT: Mendu, Nandini  
 ; APPLICANT: Song, Wen  
 ; TITLE OF INVENTION: Root Cortex Specific Gene Promoter  
 ; NUMBER OF SEQUENCES: 9  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &  
 ; STREET: Post Office Drawer 34009  
 ; CITY: Charlotte  
 ; STATE: North Carolina  
 ; COUNTRY: USA  
 ; ZIP: 28234  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/508,786  
 ; FILING DATE:  
 ; CLASSIFICATION: 800  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Sibley, Kenneth D.  
 ; REGISTRATION NUMBER: 31,665  
 ; REFERENCE/DOCKET NUMBER: 5051-294  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 919-420-2200  
 ; TELEFAX: 919-881-3175  
 ; INFORMATION FOR SEQ ID NO: 1:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 2010 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: DNA (genomic)  
 ; US-08-508-786-1

Query Match 100.0%; Score 456; DB 2; Length 2010;  
 Best Local Similarity 100.0%; Pred. No. 8.2e-86;  
 Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGAAACATATTCAATACTTGTGCTACTCATATCGCTAGATACTTTGTGCGCTT 60  
 bb |  
 Qy 61 GCTAATAAAGATCTCGAATCGTGTAGTTTAATAATAAATAGCATATTTGTTAGGA 120  
 Db |  
 Qy 121 ATTAGTATTTTGGATTTAATCTTATTTGACTTGTAACTGTTATTAATTTCAAGGCC 180  
 Db |  
 Qy 1079 ATTAGTATTTTGGATTTAATCTTATTTGACTTGTAACTGTTATTAATTTCAAGGCC 1138  
 Qy 181 ATGAAAATTTAATGCTTAACTTACTATATAATAATTTTCAATATGTAATAA 240  
 Db |  
 Qy 1139 ATGAAAATTTAATGCTTAACTTACTATATAATAATTTTCAATATGTAATAA 1198  
 Qy 241 TTTAATCGGTATAGTTTCAATTTTTCAAATTTTATTTTATAAAAATTTAACTTACCCT 300  
 Db |  
 Qy 1199 TTTAATCGGTATAGTTTCAATTTTTCAAATTTTATTTTATAAAAATTTAACTTACCCT 1258  
 Qy 301 AATTATCGGTATAGTTTATAATAATAATTTTCAATGCTTCTCCAGAGAACCTAA 360  
 Db |  
 Qy 1259 AATTATCGGTATAGTTTATAATAATAATTTTCAATGCTTCTCCAGAGAACCTAA 1318  
 Db |

Qy 361 AATCGGTTCCGTCGGACGCGTTTCAATCGGTTTGTAGTCGATTTTCAAAATTTCAATTGACACT 420  
 Db |  
 Qy 1319 AATCGGTTCCGTCGGACGCGTTTCAATCGGTTTGTAGTCGATTTTCAAAATTTCAATTGACACT 1378  
 Db |  
 Qy 421 CCTAGTGGTTGTATAGTAAAGAGAGCGTTTACAGAG 456  
 Db |  
 Qy 1379 CCTAGTGGTTGTATAGTAAAGAGCGTTTACAGAG 1414  
 Db |

RESULT 10

PCT-US96-12158-1  
 ; Sequence 1, Application PC/TUS9612158  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Conkling, Mark A.  
 ; APPLICANT: Mendu, Nandini  
 ; APPLICANT: Song, Wen  
 ; TITLE OF INVENTION: Root Cortex Specific Gene Promoter  
 ; NUMBER OF SEQUENCES: 9  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &  
 ; STREET: Post Office Drawer 34009  
 ; CITY: Charlotte  
 ; STATE: North Carolina  
 ; COUNTRY: USA  
 ; ZIP: 28234  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: PCT/US96/12158  
 ; FILING DATE:  
 ; CLASSIFICATION:  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Sibley, Kenneth D.  
 ; REGISTRATION NUMBER: 31,665  
 ; REFERENCE/DOCKET NUMBER: 5051-294  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 919-420-2200  
 ; TELEFAX: 919-881-3175  
 ; INFORMATION FOR SEQ ID NO: 1:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 2010 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: DNA (genomic)  
 ; PCT-US96-12158-1

Query Match 100.0%; Score 456; DB 5; Length 2010;  
 Best Local Similarity 100.0%; Pred. No. 8.2e-86;  
 Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGAAACATATTCAATACTTGTGCTACTCATATCGCTAGATACTTTGTGCGCTT 60  
 Db |  
 Qy 959 GGAACATATTCAATACTTGTGCTACTCATATCGCTAGATACTTTGTGCGCTT 1018  
 Db |  
 Qy 61 GCTAATAAAGATCTCGAATCGTGTAGTTTAATAATAAATAGCATATTTGTTAGGA 120  
 Db |  
 Qy 1019 GCTAATAAAGATCTCGAATCGTGTAGTTTAATAATAAATAGCATATTTGTTAGGA 1078  
 Qy 121 ATTAGTATTTTGGATTTAATCTTATTTGACTTGTAACTGTTATTAATTTCAAGGCC 180  
 Db |  
 Qy 1079 ATTAGTATTTTGGATTTAATCTTATTTGACTTGTAACTGTTATTAATTTCAAGGCC 1138  
 Qy 181 ATGAAAATTTAATGCTTAACTTACTATATAATAATTTTCAATATGTAATAA 240  
 Db |  
 Qy 1139 ATGAAAATTTAATGCTTAACTTACTATATAATAATTTTCAATATGTAATAA 1198  
 Qy 241 TTTAATCGGTATAGTTTCAATTTTTCAAATTTTATTTTATAAAAATTTAACTTACCCT 300  
 Db |

Db 1199 TTTAATCGGTATAGTTCGATATTTTTTCAATTTTATATAAATAAAAAAATTTACCCT 1258  
 Qy 301 AATTATCGGTACAGTTATAGATTTATATAAATAAATCTACGGTTCTTCAGAGAAACCTAAA 360  
 Db 1259 AATTATCGGTACAGTTATAGATTTATATAAATAAATCTACGGTTCTTCAGAGAAACCTAAA 1318  
 Qy 361 AATCGGTTCCGTCGGACGGTTCGATCGGTTTACGATTTTCAAAATATTCATTGACACT 420  
 Db 1319 AATCGGTTCCGTCGGACGGTTCGATCGGTTTACGATTTTCAAAATATTCATTGACACT 1378  
 Qy 421 CCTAGTTGTTGTTATAGTATAAAGCAGTTACAGAG 456  
 Db 1379 CCTAGTTGTTGTTATAGTATAAAGCAGTTACAGAG 1414

RESULT 11  
 US-08-508-786-6  
 ; Sequence 6, Application US/08508786  
 ; Patent No. 5837876  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Conkling, Mark A.  
 ; APPLICANT: Mendu, Nandini  
 ; APPLICANT: Song, Wen  
 ; TITLE OF INVENTION: Root Cortex Specific Gene Promoter  
 ; NUMBER OF SEQUENCES: 9  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &  
 ; STREET: Post Office Drawer 34009  
 ; CITY: Charlotte  
 ; STATE: No 5837876th Carolina  
 ; COUNTRY: USA  
 ; ZIP: 28234  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/508.786  
 ; FILING DATE:  
 ; CLASSIFICATION: 800  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Sibley, Kenneth D.  
 ; REGISTRATION NUMBER: 31,665  
 ; REFERENCE/DOCKET NUMBER: 5051-294  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 919-420-2200  
 ; TELEFAX: 919-881-3175  
 ; INFORMATION FOR SEQ ID NO: 6:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 722 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: DNA (genomic)  
 ; US-08-508-786-6

Query Match 32.5%; Score 148; DB 2; Length 722;  
 Best Local Similarity 100.0%; Pred. No. 2.2e-22;  
 Matches 148; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 309 GTACAGTTATAGATTTATATAAATAAATCTACGGTTCTTCAGAGAAACCTAAAATCGGTT 368  
 Db 1 GTACAGTTATAGATTTATATAAATAAATCTACGGTTCTTCAGAGAAACCTAAAATCGGTT 60  
 Qy 369 CGGTCCGGACGGTTCGATCGGTTTACGATTTTCAAAATATTCATTGACACTCCCTAGTTG 428  
 Db 61 CGGTCCGGACGGTTCGATCGGTTTACGATTTTCAAAATATTCATTGACACTCCCTAGTTG 120  
 Qy 429 TTGTTATAGTATAAAGCAGTTACAGAG 456  
 Db 121 TTGTTATAGTATAAAGCAGTTACAGAG 148

RESULT 12  
 PCI-US96-12158-6  
 ; Sequence 6, Application PC/TUS9612158  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Conkling, Mark A.  
 ; APPLICANT: Mendu, Nandini  
 ; APPLICANT: Song, Wen  
 ; TITLE OF INVENTION: Root Cortex Specific Gene Promoter  
 ; NUMBER OF SEQUENCES: 9  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park &  
 ; STREET: Post Office Drawer 34009  
 ; CITY: Charlotte  
 ; STATE: North Carolina  
 ; COUNTRY: USA  
 ; ZIP: 28234  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: PCT/US96/12158  
 ; FILING DATE:  
 ; CLASSIFICATION:  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Sibley, Kenneth D.  
 ; REGISTRATION NUMBER: 31,665  
 ; REFERENCE/DOCKET NUMBER: 5051-294  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 919-420-2200  
 ; TELEFAX: 919-881-3175  
 ; INFORMATION FOR SEQ ID NO: 6:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 722 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: DNA (genomic)  
 ; PCT-US96-12158-6

Query Match 32.5%; Score 148; DB 5; Length 722;  
 Best Local Similarity 100.0%; Pred. No. 2.2e-22;  
 Matches 148; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 309 GTACAGTTATAGATTTATATAAATAAATCTACGGTTCTTCAGAGAAACCTAAAATCGGTT 368  
 Db 1 GTACAGTTATAGATTTATATAAATAAATCTACGGTTCTTCAGAGAAACCTAAAATCGGTT 60  
 Qy 369 CGGTCCGGACGGTTCGATCGGTTTACGATTTTCAAAATATTCATTGACACTCCCTAGTTG 428  
 Db 61 CGGTCCGGACGGTTCGATCGGTTTACGATTTTCAAAATATTCATTGACACTCCCTAGTTG 120  
 Qy 429 TTGTTATAGTATAAAGCAGTTACAGAG 456  
 Db 121 TTGTTATAGTATAAAGCAGTTACAGAG 148

RESULT 13  
 US-08-998-416-288  
 ; Sequence 288, Application US/08998416  
 ; Patent No. 6239264  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Philippsen, Peter  
 ; APPLICANT: Pohlmann, Rainer  
 ; APPLICANT: Steiner, Sabine  
 ; APPLICANT: Mohr, Christine  
 ; APPLICANT: Wendland, Jurgen  
 ; APPLICANT: Knechtle, Philipp  
 ; APPLICANT: Rebischung, Corinne

```

; TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPPII
; TITLE OF INVENTION: AND USES THEREOF
; NUMBER OF SEQUENCES: 1152
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 6239264artis Corporation
; STREET: 3054 Cornwallis Road
; CITY: Research Triangle Park
; STATE: No. 6239264th Carolina
; COUNTRY: USA
; ZIP: 27709
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,416
; FILING DATE: 24-DEC-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: CH 0016/97
; FILING DATE: 31-DEC-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Meigs, J. Timothy
; REGISTRATION NUMBER: 38,241
; REFERENCE/DOCKET NUMBER: PF/5-30306/R/CGC1976
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-541-8587
; TELEFAX: 919-541-8689
; INFORMATION FOR SEQ ID NO: 288:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 837 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; ORIGINAL SOURCE:
; ORGANISM: PAG1241RP
; US-08-998-416-288

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Query Match 13.3%; Score 60.6; DB 3; Length 837;
Best Local Similarity 51.1%; Pred No. 0.00023;
Matches 168; Conservative 0; Mismatches 159; Indels 2; Gaps 1;
Qy 4 AACATATTCAAATGCTAGTTGCTACTCAATCGTAGAATCTTTGTCCCTTGCT 63
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
234 AAATTAGTTATTAATAATATTATAGATATTATTTCTTTAATAAATTTAATAGA 293
Qy 64 AATAAAGATACCTTGAATAGCTTAGTTTAAATATAAATAGCATAATAGAAAT 123
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
294 TTATCAATATTAATATAATATTATTTAATTTGTTTATAAATAAATATAATATTA 353
Qy 124 AGTATTTGAGTTTAAATCTATTG--ACTTGTACAGTTTTTATAATCCAAAGCCCA 181
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
354 TAAAGATTAATTTAATAATTTGPAATATTATTTTATTAATAATCTATTTTTTA 413
Qy 182 TGAATAATTTAAGCTTTATAGTTTAAACTACTATAFAAAATTTTCATATGTAAT 241
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
414 TAAATATATGTTGATTTATATTATTTAATCTTTTATAAAGAAATTTATAAATAAT 473
Qy 242 TTAATCGGTATAGTTCGATATTTTTCAATTTATTTTTTAAATAAATAAACCCTTA 301
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
474 TTTAACCTTAAATTCITATTAATTTTATATTTAATTTAATAAATAATATTTCA 533
Qy 302 ATTATCGGTACAGTTATFAGATTTATATAA 330
Db ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
534 TTTTATTTATTTAATTAATAAATAATAA 562

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RESULT 14
US-09-641-638-651
; Sequence 651, Application US/09641638
; Patent No. 6432648

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; GENERAL INFORMATION:
; APPLICANT: Blumenfeld, Marta
; APPLICANT: Bougueleret, Lydie
; APPLICANT: Chumakov, Ilya
; APPLICANT: Cohen, Annick
; TITLE OF INVENTION: BIALLELIC MARKERS DERIVED FROM GENOMIC REGIONS CARRYING
; FILE REFERENCE: GENSET.051CPI
; CURRENT APPLICATION NUMBER: US/09/641,638
; CURRENT FILING DATE: 2000-08-16
; PRIOR APPLICATION NUMBER: US 09/502,330
; PRIOR FILING DATE: 2000-02-11
; PRIOR APPLICATION NUMBER: US 60/133,200
; PRIOR FILING DATE: 1999-05-07
; PRIOR APPLICATION NUMBER: US 09/275,267
; PRIOR FILING DATE: 1999-03-23
; PRIOR APPLICATION NUMBER: US 60/119,917
; PRIOR FILING DATE: 1999-02-12
; NUMBER OF SEQ ID NOS: 1304
; SOFTWARE: Patent.pm
; SEQ ID NO 651
; LENGTH: 20674
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: 1123..3123
; OTHER INFORMATION: 5'regulatory region
; NAME/KEY: exon
; LOCATION: 3124..3297
; OTHER INFORMATION: exon 1
; NAME/KEY: exon
; LOCATION: 3871..4072
; OTHER INFORMATION: exon 2
; NAME/KEY: exon
; LOCATION: 5552..5633
; OTHER INFORMATION: exon 3
; NAME/KEY: exon
; LOCATION: 5758..5880
; OTHER INFORMATION: exon 4
; NAME/KEY: exon
; LOCATION: 5996..6099
; OTHER INFORMATION: exon 5
; NAME/KEY: exon
; LOCATION: 6349..6509
; OTHER INFORMATION: exon 6
; NAME/KEY: exon
; LOCATION: 7379..7522
; OTHER INFORMATION: exon 7
; NAME/KEY: exon
; LOCATION: 8645..8854
; OTHER INFORMATION: exon 8
; NAME/KEY: exon
; LOCATION: 12254..12340
; OTHER INFORMATION: exon 9
; NAME/KEY: exon
; LOCATION: 12854..13023
; OTHER INFORMATION: exon 10
; NAME/KEY: exon
; LOCATION: 13308..13429
; OTHER INFORMATION: exon 11
; NAME/KEY: exon
; LOCATION: 16567..16667
; OTHER INFORMATION: exon 12
; NAME/KEY: exon
; LOCATION: 16775..16945
; OTHER INFORMATION: exon 13
; NAME/KEY: exon
; LOCATION: 17063..17554
; OTHER INFORMATION: exon 14
; NAME/KEY: misc feature
; LOCATION: 17555..20674
; OTHER INFORMATION: 3'regulatory region

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Qy 291 AACTTACCCTAATTAACGGTACAGTTATAGATTTTATATAAAAAATCTACGGTCTTCAGAA 350
Db 11304 ATTTAACTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 11363
Qy 351 GAAACCTAA 359
Db 11364 TTAATTTAA 11372

```

RESULT 15

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US-09-801-861-3
; Sequence 3, Application US/09801861
; Patent No. 6492154
; GENERAL INFORMATION:
; APPLICANT: YAN, Chunhua et al.
; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: CL001098
; CURRENT APPLICATION NUMBER: US/09/801,861
; CURRENT FILING DATE: 2001-03-09
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 53332
; TYPE: DNA
; ORGANISM: Human
US-09-801-861-3

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Query Match 12.5%; Score 57; DB 4; Length 53332;
Best Local Similarity 49.8%; Pred. No. 0.0018;
Matches 144; Conservative 0; Mismatches 145; Indels 0; Gaps 0;
Qy 66 TAAAGATAC TTGAAATAGCTTAGTTTAAATATAAATAGCATAATAGATTTTAGGAATTAG 125
Db 31283 TAATAATAATTTCTAAAATGGCAATCAGTATATATTTTTATATATATATATATATATAT 31342
Qy 126 TATTTTCAGTTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 185
Db 31343 ATTTTATATATATATATATAGTTATATATATATATATATATATATATATATATATATAT 31402
Qy 186 AAATTTAATGCTTATTAGTTTTAAACTTACTATATAAAATTTTCATATGTAATAAATTTAA 245
Db 31403 ATTTGTATATATATATATATATATATATATATATATATATATATATATATATATATAT 31462
Qy 246 TCGGTATAGTTCGATATTTTTTCAATTTTATTTATAAAAATAAACAATTACCCTAATTA 305
Db 31463 TTTTATATATATATATATATATATATATATATATATATATATATATATATATATATATAT 31522
Qy 306 TCGGTACAGTTATAGATTTTATATAAAAAATCTACGGTCTTCAGAAAGAAA 354
Db 31523 TATATATATATATATATATATATATATATATATATATATATATATATATATATATATA 31571

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Search completed: August 3, 2004, 19:58:48  
Job time : 68 secs

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 3, 2004, 19:52:20 ; Search time 339 Seconds  
 (without alignments)  
 6595.374 Million cell updates/sec

Title: US-09-941-042C-1  
 Perfect score: 456  
 Sequence: 1 ggaacatattcaatacatt.....ggtaaaagcagttacagag 456

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 Gapop 10.0 , Gapext 1.0

Searched: 3222919 seqs, 2451570024 residues  
 Total number of hits satisfying chosen parameters: 6445838

Minimum DB seq length: 0  
 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 45 summaries

Database : Published Applications NA:\*

1: /cgn2\_6/ptodata/2/pubpna/US07\_PUBCOMB.seq.\*  
 2: /cgn2\_6/ptodata/2/pubpna/PCT\_NEW\_PUB.seq.\*  
 3: /cgn2\_6/ptodata/2/pubpna/US06\_NEW\_PUB.seq.\*  
 4: /cgn2\_6/ptodata/2/pubpna/US06\_PUBCOMB.seq.\*  
 5: /cgn2\_6/ptodata/2/pubpna/US07\_NEW\_PUB.seq.\*  
 6: /cgn2\_6/ptodata/2/pubpna/PCTUS\_PUBCOMB.seq.\*  
 7: /cgn2\_6/ptodata/2/pubpna/US08\_NEW\_PUB.seq.\*  
 8: /cgn2\_6/ptodata/2/pubpna/US08\_PUBCOMB.seq.\*  
 9: /cgn2\_6/ptodata/2/pubpna/US09A\_PUBCOMB.seq.\*  
 10: /cgn2\_6/ptodata/2/pubpna/US09B\_PUBCOMB.seq.\*  
 11: /cgn2\_6/ptodata/2/pubpna/US09C\_PUBCOMB.seq.\*  
 12: /cgn2\_6/ptodata/2/pubpna/US09\_NEW\_PUB.seq.\*  
 13: /cgn2\_6/ptodata/2/pubpna/US09\_NEW\_PUB.seq2.\*  
 14: /cgn2\_6/ptodata/2/pubpna/US10A\_PUBCOMB.seq.\*  
 15: /cgn2\_6/ptodata/2/pubpna/US10B\_PUBCOMB.seq.\*  
 16: /cgn2\_6/ptodata/2/pubpna/US10C\_PUBCOMB.seq.\*  
 17: /cgn2\_6/ptodata/2/pubpna/US10\_NEW\_PUB.seq.\*  
 18: /cgn2\_6/ptodata/2/pubpna/US60\_NEW\_PUB.seq.\*  
 19: /cgn2\_6/ptodata/2/pubpna/US60\_PUBCOMB.seq.\*

Result No.	Score	Match	Length	ID	Description
1	456	100.0	456	US-09-941-042C-1	Sequence 1, Appli
2	456	100.0	456	US-10-363-069-1	Sequence 1, Appli
3	66.6	14.6	5145	US-10-311-455-321	Sequence 321, App
4	66.6	14.6	5145	US-10-240-485-17	Sequence 17, Appl
5	66.6	14.6	8305	US-10-311-455-1541	Sequence 1541, Ap
6	61	13.4	6175	US-10-311-455-1280	Sequence 1280, Ap
7	61	13.4	158001	US-10-211-179-11	GENERAL INFORMATI
8	60.4	13.2	18997	US-10-172-086-17	Sequence 17, Appl
9	60.4	13.2	18997	US-10-311-455-543	Sequence 543, App
10	60.4	13.2	18997	US-10-311-507-31	Sequence 31, Appl
11	60.2	13.2	5925	US-10-311-455-1549	Sequence 1549, Ap
12	60	13.2	8305	US-10-311-455-1542	Sequence 1542, Ap
13	59.6	13.1	5407	US-10-311-455-2064	Sequence 2064, Ap
14	59.4	13.0	20674	US-10-170-097-651	Sequence 651, App

ALIGNMENTS

RESULT 1  
 US-09-941-042C-1  
 ; Sequence 1, Application US/09941042C  
 ; Publication No. US20030018997A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Conkling, Mark A.  
 ; APPLICANT: Li, Yan  
 ; TITLE OF INVENTION: TRANSGENIC PLANTS CONTAINING MOLECULAR DECOYS THAT ALTER PROTEIN  
 ; TITLE OF INVENTION: THEREIN  
 ; FILE REFERENCE: 5051-471W0  
 ; CURRENT APPLICATION NUMBER: US/09/941,042C  
 ; CURRENT FILING DATE: 2002-08-20  
 ; PRIOR APPLICATION NUMBER: US 60/229,198  
 ; PRIOR FILING DATE: 2000-08-30  
 ; NUMBER OF SEQ ID NOS: 4  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 1  
 ; LENGTH: 456  
 ; TYPE: DNA  
 ; ORGANISM: Nicotiana tabacum.  
 US-09-941-042C-1

Query Match	Best Local Similarity	Score	DB	Length
100.0%	100.0%	456	13	456
456	456	Conservative	0	Mismatches
0	0	Indels	0	Gaps
0	0			

QY 1 GGAAACATATTCAATACATTTGCTACTCATATAATCGCTAGCAATACTTTGGCCCTT 60  
 |||||  
 1 GGAAACATATTCAATACATTTGCTACTCATATAATCGCTAGCAATACTTTGGCCCTT 60  
 |||||

QY 61 GCTAATAAGAGTACTTTGAAATAGCTTAGTTAAATATAAATAGCAATAATAGATTTTAGGA 120  
 |||||  
 61 GCTAATAAGAGTACTTTGAAATAGCTTAGTTAAATATAAATAGCAATAATAGATTTTAGGA 120  
 |||||

QY 121 ATTAGTATTGAGTTAATTAATTAATGACTTTGAAACAGTTTTTAAATTTCCAGAGCCC 180  
 |||||  
 121 ATTAGTATTGAGTTAATTAATTAATGACTTTGAAACAGTTTTTAAATTTCCAGAGCCC 180  
 |||||

Qy 181 ATGAAAATTAAGCTTATTACTTTAAACTTACTACTATAATAAATTTTTCATATGTAAAA 240  
 Db 181 ATGAAAATTAAGCTTATTACTTTAAACTTACTACTATAATAAATTTTTCATATGTAAAA 240  
 Qy 241 TTTAATCGGTATAGTTCGATATTTTCAATTTAATTTTTATATAAATAAATAAACTTACCCT 300  
 Db 241 TTTAATCGGTATAGTTCGATATTTTCAATTTAATTTTTATATAAATAAATAAACTTACCCT 300  
 Qy 301 AATTATCGGTACAGTTPAGATTTATATAAANAATCTACGGTTCTTCAGAGAAACCTTAAA 360  
 Db 301 AATTATCGGTACAGTTPAGATTTATATAAANAATCTACGGTTCTTCAGAGAAACCTTAAA 360  
 Qy 361 AATCGGTTCCGTGGAGGTTCCGATCGGTTTACTCGATTTTCAAAATAATTCATTTGACACT 420  
 Db 361 AATCGGTTCCGTGGAGGTTCCGATCGGTTTACTCGATTTTCAAAATAATTCATTTGACACT 420  
 Qy 421 CCTAGTTGTTTATAGTAAAAAGCAGTTACAGAG 456  
 Db 421 CCTAGTTGTTTATAGTAAAAAGCAGTTACAGAG 456

RESULT 2  
 US-10-363-069-1  
 ; Sequence 1, Application US/10363069  
 ; Publication No. US20040103454A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Conkling, Mark A.  
 ; APPLICANT: Li, Yan  
 ; TITLE OF INVENTION: TRANSGENIC PLANTS CONTAINING MOLECULAR DECOYS THAT ALTER PROTEIN  
 ; TITLE OF INVENTION: CONTENT THEREIN  
 ; FILE REFERENCE: 5051-471XX  
 ; CURRENT APPLICATION NUMBER: US/10/363,069  
 ; PRIOR FILING DATE: 2003-02-28  
 ; PRIOR APPLICATION NUMBER: PCT/US01/26788  
 ; PRIOR FILING DATE: 2001-08-28  
 ; PRIOR APPLICATION NUMBER: US 60/229,198  
 ; PRIOR FILING DATE: 2000-08-30  
 ; NUMBER OF SEQ ID NOS: 4  
 ; SOFTWARE: PatentIn version 3.2  
 ; SEQ ID NO 1  
 ; LENGTH: 456  
 ; TYPE: DNA  
 ; ORGANISM: Nicotiana tabacum  
 US-10-363-069-1

Query Match 100.0%; Score 456; DB 17; Length 456;  
 Best Local Similarity 100.0%; Pred. No. 1.2e-69;  
 Matches 456; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 GGAACATATTTCAATAGTGTAGTTTGGTACTCATATAATCGTAGAATCTTTGTGCCTT 60  
 Db 1 GGAACATATTTCAATAGTGTAGTTTGGTACTCATATAATCGTAGAATCTTTGTGCCTT 60  
 Qy 61 GCTAATAAAGATCTTGAATAAGCTTTAATATAAATAAATAGCAATAAATAGGATTTAGGA 120  
 Db 61 GCTAATAAAGATCTTGAATAAGCTTTAATATAAATAAATAGCAATAAATAGGATTTAGGA 120  
 Qy 121 ATTAGTTTTTGTAGTTAAATACTTATTTGATTTGATTTGATTTGATTTGATTTGATTTG 180  
 Db 121 ATTAGTTTTTGTAGTTAAATACTTATTTGATTTGATTTGATTTGATTTGATTTGATTTG 180  
 Qy 181 ATGAAAAATTAATGCTTTTATAGTTTTAAACTTACTATATAAATTTTTCATATGTAAAA 240  
 Db 181 ATGAAAAATTAATGCTTTTATAGTTTTAAACTTACTATATAAATTTTTCATATGTAAAA 240  
 Qy 241 TTTAATCGGTATAGTTCGATATTTTCAATTTAATTTTTATATAAATAAATAAACTTACCCT 300  
 Db 241 TTTAATCGGTATAGTTCGATATTTTCAATTTAATTTTTATATAAATAAATAAACTTACCCT 300  
 Qy 301 AATTATCGGTACAGTTPAGATTTATATAAANAATCTACGGTTCTTCAGAGAAACCTTAAA 360  
 Db 301 AATTATCGGTACAGTTPAGATTTATATAAANAATCTACGGTTCTTCAGAGAAACCTTAAA 360

Qy 361 AATCGGTTCCGTGGAGGTTCCGATCGGTTTACTCGATTTTCAAAATAATTCATTTGACACT 420  
 Db 361 AATCGGTTCCGTGGAGGTTCCGATCGGTTTACTCGATTTTCAAAATAATTCATTTGACACT 420  
 Qy 421 CCTAGTTGTTTATAGTAAAAAGCAGTTACAGAG 456  
 Db 421 CCTAGTTGTTTATAGTAAAAAGCAGTTACAGAG 456

RESULT 3  
 US-10-311-455-321  
 ; Sequence 321, Application US/103111455  
 ; Publication No. US20030143606A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: OLEK, Alexander  
 ; APPLICANT: PIEPENBROCK, Christian  
 ; TITLE OF INVENTION: Diagnosis of Diseases Associated with the Immune System by Determ  
 ; TITLE OF INVENTION: Cytosine methylation  
 ; FILE REFERENCE: 5013.1014  
 ; CURRENT APPLICATION NUMBER: US/10/311,455  
 ; CURRENT FILING DATE: 2002-12-16  
 ; PRIOR APPLICATION NUMBER: PCT/EP01/07537  
 ; PRIOR FILING DATE: 2001-07-02  
 ; PRIOR APPLICATION NUMBER: DE 10032529.7  
 ; PRIOR FILING DATE: 2000-06-30  
 ; PRIOR APPLICATION NUMBER: DE 10043826.1  
 ; PRIOR FILING DATE: 2000-09-01  
 ; NUMBER OF SEQ ID NOS: 2424  
 ; SEQ ID NO 321  
 ; LENGTH: 5145  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Chemically treated genomic DNA (Homo sapiens)  
 US-10-311-455-321

Query Match 14.6%; Score 66.6; DB 15; Length 5145;  
 Best Local Similarity 51.9%; Pred. No. 0.044;  
 Matches 176; Conservative 0; Mismatches 159; Indels 4; Gaps 1;  
 Qy 4 AACATATTCATATAGTGTAGTTTGGTACTCATATAATCGTAGAATACTTTGTGCCTTGGCT 63  
 Db 511 AATATATTTATAGTTTAAAGTTTAAATTTTTTTGGGTTATTTATTTATTTGGGTTGTTT 570  
 Qy 64 AATAAAGATCTTGAATAAGCTTTAATAAATAAATAAATAAATAAATAAATAAATAAATAA 123  
 Db 571 TATGTTTATAGGGGATATATAATTTAAATAAATAAATAAATAAATAAATAAATAAATAA 630  
 Qy 124 AGTATTTTCAGTTTAAATACTTATTGACTTTGTAAACAGTTTTTATATAATCCAGGCCCA 183  
 Db 631 TTTTTCATGTTTGGTATTGTTTATAGGTTTATAGGTTTATAGGTTTATAGGTTTAAAGATA 686  
 Qy 184 AAAAATTTAATGCTTTATAGTTTTAAACTTACTATATAAATTTTTCATATGTAAAAATTT 243  
 Db 687 AAAAAGATTTATTTATTTTTTAAATATAAATTTTGGATTTGTTGTTTATATTTATAGTT 746  
 Qy 244 AATCGGTATAGTTCGATATTTTCAATTTAATTTTTATATAAATAAATAAATAAATAA 303  
 Db 747 TGTATATATAGGATTTAATTAATTTTTTTTTTTTTTTTTTTTTTTTTTAGATAATTTAA 806  
 Qy 304 TATCGGTACAGTTATAGATTTTATAAATAAATAAATAAATAAATAAATAAATAAATAA 342  
 Db 807 TTTGTTTTTAAATATTTAGTATATAAATTTTATAGTTT 845

RESULT 4  
 US-10-240-485-17  
 ; Sequence 17, Application US/10240485  
 ; Publication No. US20030148327A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: OLEK, Alexander

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; APPLICANT: PIPERBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with
; FILE OF INVENTION: Metastasis
; FILE REFERENCE: 5013.1007
; CURRENT APPLICATION NUMBER: US/10/240.485
; CURRENT FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: PCT/EP01/03970
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: DE 10019058.8
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 202
; SEQ ID NO 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-240-485-17

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Query Match 14.6%; Score 66.6; DB 15; Length 5145;
Best Local Similarity 51.9%; Pred. No. 0.044;
Matches 176; Conservative 0; Mismatches 159; Indels 4; Gaps 1;
Qy 4 AACATTTTCAATACATTCAGTTTCCTACTCATATCCCTAGATACATTCCTGCCTGCT 63
Db 511 AAATAATTTTAAAGTTTAAAGTTTAAATAATTTTTTGGGTATTTTAAATTTTGGGTTT 570
Qy 64 AATAAAGATACCTTGAATAGCTTAGTTTAAAFATAAATAGCATAATAGGAAAT 123
Db 571 TAGTGTATGAGGATATATATTTAATTTTAAATTTTAAATTTTAAATTTTAAATTTG 630
Qy 124 AGTATTTGAGTTTAAATCTATTGACTTGTACCTTTTAAATTTTAAATTTTAAATTTT 183
Db 631 TTTTGTATGAGTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTG 686
Qy 184 AAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTT 243
Db 687 AAAAAGATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAA 746
Qy 244 AATCGGTATAGCTATATTTTTCAATTTTTTAAATAAATAAATAAATAAATAAATAA 303
Db 747 TCTTATATATGATTTATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAA 806
Qy 304 TATCGGTACAGTTATAGATTTTAAATAAATAAATAAATAAATAAATAAATAAATAA 342
Db 807 TTTTGTATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAA 845

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RESULT 5
US-10-311-455-1541/c
; Sequence 1541, Application US/10311455
; Publication No. US20030143606A1
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIPERBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with the Immune System by Determ
; FILE OF INVENTION: cytosine methylation
; FILE REFERENCE: 5013.1014
; CURRENT APPLICATION NUMBER: US/10/311,455
; CURRENT FILING DATE: 2002-12-16
; PRIOR APPLICATION NUMBER: PCT/EP01/07537
; PRIOR FILING DATE: 2001-07-02
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1

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; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 2424
; SEQ ID NO 1541
; LENGTH: 8305
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-311-455-1541

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Query Match 14.6%; Score 66.4; DB 15; Length 8305;
Best Local Similarity 49.2%; Pred. No. 0.056;
Matches 175; Conservative 0; Mismatches 181; Indels 0; Gaps 0;
Qy 8 TATTCAATACATTCAGTTTCCTACTCATATCCCTAGATACATTCCTGCCTGCTAATA 67
Db 6424 TATTTATTTATATAAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 6365
Qy 68 AAGTACTTGAATAGCTTAGTTTAAATAATAATAATAATAATAATAATAATAATAATAATA 127
Db 6364 AAAAATATATTTATATATTTATCAATTTATATAATAATAATAATAATAATAATAATA 6305
Qy 128 TTTTGAGTTTAAATTTACCTTTCAGCTTGTACAGTTTTTATAATTTCCRAAGCCCATGAAA 187
Db 6304 TAAATATATAAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 6245
Qy 188 ATTTAAGCTTTATTTAGTTTAACTTACTATAATAAATTTTTTTCATATGTAATAATTAATC 247
Db 6244 AATAATATATATATTTACTATATAATAATAATAATAATAATAATAATAATAATAATA 6185
Qy 248 GGTATAGTTCGATATTTTTTCAATTTATTTTATAAATAAATAAATAAATAAATAAATA 307
Db 6184 TAAATATATAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 6125
Qy 308 GGTACAGTTATAGATTTATATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 363
Db 6124 TATATTTTATATATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 6069

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RESULT 6
US-10-311-455-1280
; Sequence 1280, Application US/10311455
; Publication No. US20030143606A1
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIPERBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with the Immune System by Determ
; FILE OF INVENTION: cytosine methylation
; FILE REFERENCE: 5013.1014
; CURRENT APPLICATION NUMBER: US/10/311,455
; CURRENT FILING DATE: 2002-12-16
; PRIOR APPLICATION NUMBER: PCT/EP01/07537
; PRIOR FILING DATE: 2001-07-02
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 2424
; SEQ ID NO 1280
; LENGTH: 6175
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-311-455-1280

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Query Match 13.4%; Score 61; DB 15; Length 6175;
Best Local Similarity 48.7%; Pred. No. 0.43;
Matches 166; Conservative 0; Mismatches 175; Indels 0; Gaps 0;
Qy 7 ATATTCAATACATTCAGTTTCCTACTCATATCCCTAGATACATTCCTGCCTGCTAATA 66

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Db 4615 ATATTTATTTTCTGATATTTATATTTATATTTGTTTTTATATATATTTGTTTTTAT 4674  
 Qy 67 AAAGATCTGAAATAGCTTGTAGTTTAAATATAAATAAATAGCAATATAGATTTTAGGAATTAGT 126  
 Db 4675 ATATTTATATAATGATTAAGTTTATATTTATATATATATATATATATATATATATATAT 4734  
 Qy 127 ATTTTGGAGTTAAATCTACTTATTTGACTTGTACAGCTTTTATAATCCCAAGCCCATGAAA 186  
 Db 4735 TGTTTTTATAATTTGGTATTTATACGATATATTTATTTATATATATATATATATATAT 4794  
 Qy 187 AATTTAAATGCTTTATTTAGTTTTTAAACTTTACTATATAAATTTTTCATATGTAATAATTAAT 246  
 Db 4795 GTTTAAATTTATATTTGTTATTTGTTATATATATATATATATATATATATATATATAT 4854  
 Qy 247 CGGTATAGTTCGATATTTTTCATATTTTAAATTTTAAATAAATAAATAAATAAATAAATA 306  
 Db 4855 ATTTATTTATGTTTATATATTTTATATATATATATATATATATATATATATATATAT 4914  
 Qy 307 CGGTACAGTTATAGATTTATATAAATAAATAAATAAATAAATAAATAAATAAATAAATA 347  
 Db 4915 GTATTTTATATAAT 4955

RESULT 7  
 US-10-211-179-11/c  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Nicholas M. Dean  
 ; APPLICANT: Kenneth W. Doble  
 ; TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOTYROSYL PHOSPHATASE ACTIVATOR EXP  
 ; FILE REFERENCE: PFS-0011  
 ; CURRENT APPLICATION NUMBER: US/10/211,179  
 ; CURRENT FILING DATE: 2002-08-01  
 ; NUMBER OF SEQ ID NOS: 119  
 ; OTHER INFORMATION: n = a, t, c, or g  
 US-10-211-179-11

Query Match 13.4%; Score 61; DB 17; Length 158001;  
 Best Local Similarity 51.1%; Pred. No. 1.2;  
 Matches 170; Conservative 0; Mismatches 160; Indels 3; Gaps 1;  
 Qy 3 AAACATATTCATATCAATGTTAGTTGCTACTCATAAATCGCTAGATACTTTTGGCCTTGC 62  
 Db 22622 AT 22563  
 Qy 63 TAATAAAGACTTGAATAGCTTA---GTTTAAATAAATAAATAGCATAAATAGATTTTAGG 119  
 Db 22562 TATATAAAT 22503  
 Qy 120 AATTAGTATTTTGGAGTTTAAATTTACTTATTCAGTTGTAACAGTTTTTATATAATCCAAAGCC 179  
 Db 22502 TATTTATATATAAT 22443  
 Qy 180 CATGAAAATTTAATGCTTTTATAGTTTAAACTTACTATATAAATTTTTCATATGTAATA 239  
 Db 22442 TTTATATATATATATAAATATATATATATATATATATATATATATATATATATAT 22383  
 Qy 240 ATTTAATCGGTATAGTTCGATATTTTTCATATTTTAAATTTTAAATAAATAAATAAATA 239  
 Db 22382 ATATATTTTAT 22323  
 Qy 300 TAATTTATCGGTACAGTTATAGATTTTATATAAAA 332  
 Db 22322 TA 22290

RESULT 8  
 US-10-172-086-17  
 ; Sequence 17, Application US/10172086  
 ; Publication No. US20030113750A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Epigenomics AG  
 ; TITLE OF INVENTION: Method and nucleic acids for the differentiation  
 ; OTHER INFORMATION: of prostate tumors

FILE REFERENCE:  
 ; CURRENT APPLICATION NUMBER: US/10/172,086  
 ; CURRENT FILING DATE: 2002-06-13  
 ; NUMBER OF SEQ ID NOS: 116  
 ; SEQ ID NO 17  
 ; LENGTH: 18997  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)  
 US-10-172-086-17  
 Query Match 13.2%; Score 60.4; DB 15; Length 18997;  
 Best Local Similarity 49.7%; Pred. No. 0.78;  
 Matches 154; Conservative 0; Mismatches 156; Indels 0; Gaps 0;  
 Qy 19 TTGTAGTTTGGCTACTCATAATCGCTAGATACTTTGCTGCTGCTAATAAAGATACCTTGA 78  
 Db 13515 TTGAGGTTTTTTTTTAAATTTTGGGATTTTGATTTATATGTTTTTTTATTTGAAATAATTTGG 13574  
 Qy 79 AATAGCTTAGTTTAAATATAAATAAATAGCAATAATAGATTTTAGGAATTAGTATTTTGGATTTA 138  
 Db 13575 TTATTTATGATTTATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 13634  
 Qy 139 ATTACTTATTTGACTTGTACAGTTTTTATAAATCCCAAGCCCATGAAAATAATTAATGCIT 198  
 Db 13635 TTTTTTTTTTTTTTTTTTATATATTTTTTAAATAAATAAATAAATAAATAAATAAATA 13694  
 Qy 199 TATTAGTTTAAACTTACTATATAAATTTTTCATATGTAATAAATTTTAAATTTTAAATTTTAA 258  
 Db 13695 TATTATTAATAGTTTTTATTTTTTTAGATTTTTTTTTTAAATTTTAAATTTTAAATTTTAA 13754  
 Qy 259 ATATTTTTTCAATTTATTTTTTATAAATAAATAAATAAATAAATAAATAAATAAATAAATA 318  
 Db 13755 ATAATTTATGTTAT 13814  
 Qy 319 AGATTTATAT 328  
 Db 13815 GATTTGTTTT 13824

RESULT 9  
 US-10-311-455-543  
 ; Sequence 543, Application US/10311455  
 ; Publication No. US20030143606A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: OLEK, Alexander  
 ; APPLICANT: BERLIN, Kurt  
 ; TITLE OF INVENTION: Diagnosis of Diseases Associated with the Immune System by Determ  
 ; TITLE OF INVENTION: cytosine methylation  
 ; FILE REFERENCE: 5013.1014  
 ; CURRENT APPLICATION NUMBER: US/10/311,455  
 ; CURRENT FILING DATE: 2002-12-16  
 ; PRIOR APPLICATION NUMBER: PCT/EP01/07537  
 ; PRIOR FILING DATE: 2001-07-02  
 ; PRIOR APPLICATION NUMBER: DE 10032529.7  
 ; PRIOR FILING DATE: 2000-06-30  
 ; PRIOR APPLICATION NUMBER: DE 10043826.1  
 ; PRIOR FILING DATE: 2000-09-01  
 ; NUMBER OF SEQ ID NOS: 2424  
 ; SEQ ID NO 543  
 ; LENGTH: 18997  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)  
 US-10-311-455-543  
 Query Match 13.2%; Score 60.4; DB 15; Length 18997;  
 Best Local Similarity 49.7%; Pred. No. 0.78;  
 Matches 154; Conservative 0; Mismatches 156; Indels 0; Gaps 0;

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Qy 19 TTGTAGTTTGCTACTCATAAATCGCTAGAAATACCTTTGTCCTTGTAAATAAAGAACACTTGA 78
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13515 TTGAGTTTTTTTAAATTTTGGGATTTTGATTTTATGTTTTTATTTGAAATAATTTGG 13574
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 79 AATAGCTTAGTTTTAAATAAATAAGCAATAAGATTTTACGAAATAGTATTTTGGAGTTTA 138
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13575 TTATTAATGATTAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 13634
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 139 ATTACTTATGACTGTAACTGTTTAAATTTAAATTTCAAGCCCATGAAAAATTTAATGCTT 198
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13635 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTA 13694
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 199 TATTAGTTTTAACTTACTATATAAATTTTCAATATGTAATAATTTTAAATCGGTATAGTTTCG 258
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13695 TATTAATTAAGTTTTTTTTTTTTTTTTTTTTTTTTTTTGTAGTTTTTAAATGAAATGAATAAG 13754
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 259 APATTTTTTCAATTTTATTTAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 318
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13755 ATAATTAATGATTAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 13814
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 319 AGATTTATAT 328
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13815 GATTTGTTTT 13824
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

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RESULT 10
US-10-311-507-31
; Sequence 31, Application US/10311507
; Publication No. US20040115630A1
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIEPENROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Method and nucleic acids for the analysis of astrocytomas
; FILE REFERENCE: 5013.1013
; CURRENT APPLICATION NUMBER: US/10/311,507
; PRIOR FILING DATE: 2002-12-16
; PRIOR APPLICATION NUMBER: PCT/EP01/07538
; PRIOR FILING DATE: 2001-07-02
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 136
; SEQ ID NO 31
; LENGTH: 18997
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-311-507-31

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Query Match 13.2%; Score 60.4; DB 17; Length 18997;
Best Local Similarity 49.7%; Pred. No. 0.78;
Matches 154; Conservative 0; Mismatches 156; Indels 0; Gaps 0;

Qy 19 TTGTAGTTTGCTACTCATAAATCGCTAGAAATACCTTTGTCCTTGTAAATAAAGAACACTTGA 78
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13515 TTGAGTTTTTTTAAATTTTGGGATTTTGATTTTATGTTTTTATTTGAAATAATTTGG 13574
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 79 AATAGCTTAGTTTTAAATAAATAAGCAATAAGATTTTACGAAATAGTATTTTGGAGTTTA 138
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13575 TTATTAATGATTAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 13634
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 139 ATTACTTATGACTGTAACTGTTTAAATTTAAATTTCAAGCCCATGAAAAATTTAATGCTT 198
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13635 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTA 13694
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 199 TATTAGTTTTAACTTACTATATAAATTTTCAATATGTAATAATTTTAAATCGGTATAGTTTCG 258
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13695 TATTAATTAAGTTTTTTTTTTTTTTTTTTTTTTTTTTTGTAGTTTTTAAATGAAATGAATAAG 13754
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 259 APATTTTTTCAATTTTATTTAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 318
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

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Db 13755 ATAATTAATGATTAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 13814
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 319 AGATTTATAT 328
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 13815 GATTTGTTTT 13824
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

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RESULT 11
US-10-311-455-1549
; Sequence 1549, Application US/10311455
; Publication No. US20030143606A1
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIEPENROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with the Immune System by Determ
; FILE REFERENCE: 5013.1014
; CURRENT APPLICATION NUMBER: US/10/311,455
; CURRENT FILING DATE: 2002-12-16
; PRIOR APPLICATION NUMBER: PCT/EP01/07537
; PRIOR FILING DATE: 2001-07-02
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 2424
; SEQ ID NO 1549
; LENGTH: 5925
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-311-455-1549

```

```

Query Match 13.2%; Score 60.2; DB 15; Length 5925;
Best Local Similarity 50.9%; Pred. No. 0.59;
Matches 143; Conservative 0; Mismatches 138; Indels 0; Gaps 0;

Qy 65 ATAAGATACCTTGAATAAGCTTAGTTTAAATAATAATAATAATAATAATAATAATAATAATA 124
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2199 ATAAGGATTTTGTAGATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 2258
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 125 GTATTTTACAGTTTAACTTACTTATTTACCTTTGTTAAACAGTTTTTATATATCCCAAGCCCAATGA 184
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2259 GAAATTTGAAATTTGTTTTAGTTTGTAGTTTGTAGTTTGTAGTTTGTAGTTTGTAGTTTGT 2318
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 185 AAAATTTAATGCTTTATTAGTTTAAACTTACTATATAATAATAATAATAATAATAATAATAATA 244
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2319 GGTATTAAAGTATTTGTTTTTATTTAGATTTTATTTAAATTTTTTTTTTTTTTAAATAAT 2378
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 245 ATCGGTATAGTTCGATATTTTTCAATTTTTTAAATTTTATTTTATATAAAAATAAAAATAAACCTAAC 304
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2379 ATAATGATTTTTTAAATTTTTTTTTTTTTTTTTTTTTTTGAGATATGTTTATATAAATTTTTTTGTTGATA 2438
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Qy 305 ATCGGTACAGTTATAGATTTATATAAAAATCTACCGTTCCT 345
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2439 GTATTTTTTGTGTAGTAAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 2479
  ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

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RESULT 12
US-10-311-455-1542
; Sequence 1542, Application US/10311455
; Publication No. US20030143606A1
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIEPENROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with the Immune System by Determ
; FILE REFERENCE: 5013.1014
; CURRENT APPLICATION NUMBER: US/10/311,455
US-10-311-455-1542

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\* CURRENT FILING DATE: 2002-12-16  
 \* PRIOR APPLICATION NUMBER: PCT/EP01/07537  
 \* PRIOR FILING DATE: 2001-07-02  
 \* PRIOR APPLICATION NUMBER: DE 10032529.7  
 \* PRIOR FILING DATE: 2000-06-30  
 \* PRIOR APPLICATION NUMBER: DE 10043826.1  
 \* PRIOR FILING DATE: 2000-09-01  
 \* NUMBER OF SEQ ID NOS: 2424  
 \* SEQ ID NO 1542  
 \* LENGTH: 8305  
 \* TYPE: DNA  
 \* ORGANISM: Artificial Sequence  
 \* FEATURE:  
 \* OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)  
 US-10-311-455-1542

Query Match 13.2%; Score 60; DB 15; Length 8305;  
 Best Local Similarity 48.0%; Pred. No. 0.71;  
 Matches 171; Conservative 0; Mismatches 185; Indels 0; Gaps 0;

Qy 8 TATTCAATACATGCTAGTTGGCTACTCATTAATCGCTAGAAATCTTTGGCCCTTGCTAATA 67  
 Db 1882 TAITTTATTAATAAATAATATATGTTTAAATATATTAATAATATATTAATAATATATTAATA 1941  
 Qy 68 AAGTACTTGAATAGCTTAGTTTAAATATAAATAGCATATAGATTTTAGGAATTAGTA 127  
 Db 1942 AGAAATATATTAATATATTAATAATAATAATAATAATAATAATAATAATAATAATA 2001  
 Qy 128 TTTGAGTTAACTATTGCTGTAACAGTTTTTAAATTAATCCAGGCCCAATGAAAA 187  
 Db 2002 TAATATATAAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 2061  
 Qy 188 ATTTAATGCTTTATTAGCTTTTAACTACTATATAAATTTTTCATATGTAATAATTAATC 247  
 Db 2062 AATATATATAAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 2121  
 Qy 248 GGTAGTTCGATATTTTTCAATTTTAAATTTTAAATAAATAAATAAATAAATAAATAA 307  
 Db 2122 TAATATAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATAATA 2181  
 Qy 308 GGTACAGTTATAGTTTATATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 363  
 Db 2182 TATATTTTATATATATATTAATAAATAAATAAATAAATAAATAAATAAATAAATAAATA 2237

RESULT 13  
 US-10-311-455-2064  
 ; Sequence 2064, Application US/10311455  
 ; Publication No. US20030143606A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: OLEK, Alexander  
 ; APPLICANT: PIEPENBROCK, Christian  
 ; APPLICANT: BERLIN, Kurt  
 ; TITLE OF INVENTION: Diagnosis of Diseases Associated with the Immune System by Detect  
 ; FILE REFERENCE: 5013.1014  
 ; CURRENT APPLICATION NUMBER: US/10/311.455  
 ; PRIOR FILING DATE: 2002-12-16  
 ; PRIOR APPLICATION NUMBER: PCT/EP01/07537  
 ; PRIOR FILING DATE: 2001-07-02  
 ; PRIOR APPLICATION NUMBER: DE 10032529.7  
 ; PRIOR FILING DATE: 2000-06-30  
 ; PRIOR APPLICATION NUMBER: DE 10043826.1  
 ; PRIOR FILING DATE: 2000-09-01  
 ; NUMBER OF SEQ ID NOS: 2424  
 ; SEQ ID NO 2064  
 ; LENGTH: 5407  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)  
 US-10-311-455-2064

Query Match 13.1%; Score 59.6; DB 15; Length 5407;  
 Best Local Similarity 50.7%; Pred. No. 0.73;  
 Matches 143; Conservative 0; Mismatches 139; Indels 0; Gaps 0;

Qy 64 AATAAAGATACATTTGAAATAGCTTAGTTTAAATATAAATAAATAAATAAATAAATAAATAA 123  
 Db 4377 ATTATTTATTTTGGAAATGTTTATTAATAATAATAATAATAATAATAATAATAATAA 4436  
 Qy 124 AGTATTTTGGATTTAATTTTATTTGACTTGTAAACAGTTTTTATAATAATCCAGGCCCA 183  
 Db 4437 TAAATTTGGAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA 4496  
 Qy 184 AAAAAATTAATGCTTTTATAGTTTAAACTTACTATATAAATTTTTCATATGTAATAATTT 243  
 Db 4497 AAAATATTTTGGATTTTATTTAGTATTTATGTTAAATTTAAATTTTATTAATAATA 4556  
 Qy 244 AATCGGTATAGTTTCGATATTTTCAATTTTCAATTTTATTAATAAATAAATAAATAAATA 303  
 Db 4557 TATTTATAGATTTTTTTGGATTTTTTAAATGATATTTTTTAAATATAAATAAATAAATA 4616  
 Qy 304 TATCGGTACAGTTTATAGATTTTATAAATAAATAAATAAATAAATAAATAAATAAATA 345  
 Db 4617 TTTTTTAAATGTTATATATTTTTTTTATTAATAATAATAATAATAATAATAATAATA 4658

RESULT 14  
 US-10-170-097-651  
 ; Sequence 651, Application US/10170097  
 ; Publication No. US20030228582A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Blumenfeld, Marta  
 ; APPLICANT: Bouqueleret, Lydie  
 ; APPLICANT: Chumakov, Ilya  
 ; APPLICANT: Cohen, Annick  
 ; TITLE OF INVENTION: BIALLELIC MARKERS DERIVED FROM GENOMIC REGIONS CARRYING  
 ; FILE REFERENCE: GEN-T114XCZD1  
 ; CURRENT APPLICATION NUMBER: US/10/170,097  
 ; PRIOR FILING DATE: 2002-06-10  
 ; PRIOR APPLICATION NUMBER: US 09/641,638  
 ; PRIOR FILING DATE: 2000-08-16  
 ; PRIOR APPLICATION NUMBER: US 09/502,330  
 ; PRIOR FILING DATE: 2000-02-11  
 ; PRIOR APPLICATION NUMBER: US 60/133,200  
 ; PRIOR FILING DATE: 1999-05-07  
 ; PRIOR APPLICATION NUMBER: US 09/275,267  
 ; PRIOR FILING DATE: 1999-03-23  
 ; PRIOR APPLICATION NUMBER: US 60/119,917  
 ; PRIOR FILING DATE: 1999-02-12  
 ; NUMBER OF SEQ ID NOS: 1304  
 ; SOFTWARE: Patent.pm  
 ; SEQ ID NO 651  
 ; LENGTH: 20674  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: misc feature  
 ; LOCATION: 1123..3123  
 ; OTHER INFORMATION: 5'regulatory region  
 ; FEATURE:  
 ; NAME/KEY: exon  
 ; LOCATION: 3124..3297  
 ; OTHER INFORMATION: exon 1  
 ; FEATURE:  
 ; NAME/KEY: exon  
 ; LOCATION: 3871..4072  
 ; OTHER INFORMATION: exon 2  
 ; FEATURE:  
 ; NAME/KEY: exon  
 ; LOCATION: 5552..5633  
 ; OTHER INFORMATION: exon 3  
 ; FEATURE:  
 ; NAME/KEY: exon



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LOCATION: 5758..5880
OTHER INFORMATION: exon 4
FEATURE:
NAME/KEY: exon
LOCATION: 5996..6099
OTHER INFORMATION: exon 5
FEATURE:
NAME/KEY: exon
LOCATION: 6349..6509
OTHER INFORMATION: exon 6
FEATURE:
NAME/KEY: exon
LOCATION: 7379..7522
OTHER INFORMATION: exon 7
FEATURE:
NAME/KEY: exon
LOCATION: 8645..8854
OTHER INFORMATION: exon 8
FEATURE:
NAME/KEY: exon
LOCATION: 12254..12340
OTHER INFORMATION: exon 9
FEATURE:
NAME/KEY: exon
LOCATION: 12854..13023
OTHER INFORMATION: exon 10
FEATURE:
NAME/KEY: exon
LOCATION: 13308..13429
OTHER INFORMATION: exon 11
FEATURE:
NAME/KEY: exon
LOCATION: 16567..16667
OTHER INFORMATION: exon 12
FEATURE:
NAME/KEY: exon
LOCATION: 16775..16945
OTHER INFORMATION: exon 13
FEATURE:
NAME/KEY: exon
LOCATION: 17063..17554
OTHER INFORMATION: exon 14
FEATURE:
NAME/KEY: misc feature
LOCATION: 17555..20674
OTHER INFORMATION: 3'regulatory region
FEATURE:
NAME/KEY: allele
LOCATION: 1128
OTHER INFORMATION: 10-508-191 : polymorphic base C or T
FEATURE:
NAME/KEY: allele
LOCATION: 1182
OTHER INFORMATION: 10-508-245 : polymorphic base C or T
FEATURE:
NAME/KEY: allele
LOCATION: 1559
OTHER INFORMATION: 10-509-284 : polymorphic base C or T
FEATURE:
NAME/KEY: allele
LOCATION: 1570
OTHER INFORMATION: 10-509-295 : deletion of C
FEATURE:
NAME/KEY: allele
LOCATION: 1827
OTHER INFORMATION: 10-510-173 : variable motif ATTGA or TTTTTT
FEATURE:
NAME/KEY: allele
LOCATION: 2048
OTHER INFORMATION: 10-511-62 : polymorphic base C or T
FEATURE:
NAME/KEY: allele
LOCATION: 2323
OTHER INFORMATION: 10-511-337 : insertion of T
FEATURE:
NAME/KEY: allele
LOCATION: 2341
OTHER INFORMATION: 10-512-36 : polymorphic base G or C
FEATURE:
NAME/KEY: allele
LOCATION: 2623
OTHER INFORMATION: 10-512-318 : polymorphic base A or G
FEATURE:
NAME/KEY: allele
LOCATION: 2832
OTHER INFORMATION: 10-513-250 : polymorphic base A or G
FEATURE:
NAME/KEY: allele
LOCATION: 2844
OTHER INFORMATION: 10-513-262 : polymorphic base C or T
FEATURE:
NAME/KEY: allele
LOCATION: 2934
OTHER INFORMATION: 10-513-352 : polymorphic base A or G
FEATURE:
NAME/KEY: allele
LOCATION: 2947
OTHER INFORMATION: 10-513-365 : polymorphic base A or G
FEATURE:
NAME/KEY: allele
LOCATION: 3802
OTHER INFORMATION: 12-206-81 : polymorphic base A or G
FEATURE:
NAME/KEY: allele
LOCATION: 4062
OTHER INFORMATION: 10-343-231 : deletion of C
FEATURE:
NAME/KEY: allele
LOCATION: 4088
OTHER INFORMATION: 12-206-366 : polymorphic base C or T
FEATURE:
NAME/KEY: allele
LOCATION: 4109
OTHER INFORMATION: 10-343-278 : polymorphic base C or T
FEATURE:
NAME/KEY: allele
LOCATION: 4170
OTHER INFORMATION: 10-343-339 : polymorphic base G or T
FEATURE:
NAME/KEY: allele
LOCATION: 5903
OTHER INFORMATION: 10-346-23 : polymorphic base A or G
FEATURE:
NAME/KEY: allele
LOCATION: 6019
OTHER INFORMATION: 10-346-141 : polymorphic base A or G
FEATURE:
NAME/KEY: allele
LOCATION: 6141
OTHER INFORMATION: 10-346-263 : polymorphic base G or C
FEATURE:
NAME/KEY: allele
LOCATION: 6183
OTHER INFORMATION: 10-346-305 : polymorphic base C or T
FEATURE:
NAME/KEY: allele
LOCATION: 6375
OTHER INFORMATION: 10-347-111 : polymorphic base G or C
FEATURE:
NAME/KEY: allele
LOCATION: 6429
OTHER INFORMATION: 10-347-165 : polymorphic base C or T

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FEATURE:
NAME/KEY: allele
LOCATION: 6467
OTHER INFORMATION: 10-347-203 : polymorphic base A or G
FEATURE:
NAME/KEY: allele
LOCATION: 6484
OTHER INFORMATION: 10-347-220 : polymorphic base A or G

```

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Query Match      13.0%; Score 59.4; DB 16; Length 20674;
Best Local Similarity 49.5%; Pred. No. 1.2;
Matches 153; Conservative 0; Mismatches 156; Indels 0; Gaps 0;

Qy 51 TTTTGTGCTTGCCTAAAGTAAAGTACTTGGAAATAGCTTAAATAGCTTAAATAGCAATAATA 110
Db 11064 TTTTTRANTAGCTAAGGAAATATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAA 11123

Qy 111 GATTTTAGGAATTAGTATTTTGGATTTTAAATTAATTAATTAATTAATTAATTAATTAATTAAT 170
Db 11124 TTTAAATTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAA 11183

Qy 171 TCCAGGCCCATGNAAAATTTAAATGCTTTTAAATAGCTTTTAAACTTACTATATAAAATTTTTC 230
Db 11184 AATTTAAATTAATTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAA 11243

Qy 231 ATATGTAATAATTTAATCGGTATAGTTCGATATTTTCAATTTTAAATTTTAAATTTTAAATTT 290
Db 11244 AATTTAAATTAATTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAA 11303

Qy 291 AACTTACCCTAAATTCGGTACAGTTATAGATTTATATAAAAATCTACGGTTCCTTCAGAA 350
Db 11304 ATTTAACTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAAATTTTAA 11363

Qy 351 GAACCTAA 359
Db 11364 TTAATTTAA 11372

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RESULT 15
US-10-211-179-11
; GENERAL INFORMATION:
; APPLICANT: Nicholas M. Dean
; APPLICANT: Kenneth W. Doble
; TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOTYROSYL PHOSPHATASE ACTIVATOR EXP
; FILE REFERENCE: PFS-0011
; CURRENT APPLICATION NUMBER: US/10/211,179
; NUMBER OF SEQ ID NOS: 119
; OTHER INFORMATION: n = a, t, c, or g
US-10-211-179-11

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Query Match      12.9%; Score 59; DB 17; Length 158001;
Best Local Similarity 49.6%; Pred. No. 2.6;
Matches 180; Conservative 0; Mismatches 180; Indels 3; Gaps 1;

Qy 3 AAACATATTCATACATTTGCTGCTACTCATAATCGTAGAATCTTTGCGCTTGC 62
Db 127195 AAATATATATATATATATATATAAATAATAAATAATAAATAATAAATAATAAATAATA 127254

Qy 63 TAATAAAGACTTTGAAATAGCTTAA---GTTTAAATAATAAGCAATAAGATTTTGG 119
Db 127255 TATATAAAATATAAATAATAAATAATAAATAATAAATAATAAATAATAAATAATAAATA 127314

Qy 120 AATTAGTATTTTGGATTTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 179
Db 127315 TATAAATAATAAATAATAAATAATAAATAATAAATAATAAATAATAAATAATAAATAATA 127374

Qy 180 CATGAAAATTTAATGCTTTTAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 239
Db 127375 ATTATATATAAATAATAAATAATAAATAATAAATAATAAATAATAAATAATAAATAATA 127434

Qy 240 ATTTAATCGGTAGTTCGATATTTTCAATTTTCAATTTTCAATTTTCAATTTTCAATTTTCAATCC 299

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Search completed: August 3, 2004, 20:51:30
Job time : 347 secs

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Db 127435 ATATATATTTATATAAATAATAAATAATAAATAATAAATAATAAATAATAAATAATAAATA 127494
Qy 300 TAAATTCGGTACAGTTATAGATTTTATATAAATAAATAAATAAATAAATAAATAAATAAATA 359
Db 127495 TATATAAATAATAAATAATAAATAATAAATAATAAATAATAAATAATAAATAATAAATA 127554
Qy 360 AAA 362
Db 127555 AAA 127557

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